

CLAIMS

What is claimed is:

- 1 1. A computer system, comprising:
 - 2 a CPU;
 - 3 a battery subsystem;
 - 4 an AC adapter coupled to said CPU and said battery subsystem, said adapter regulating its
 - 5 output voltage for variations in output current until said output current reaches a
 - 6 threshold above which said adapter regulates its output power to an approximately
 - 7 constant level.
- 1 2. The system of claim 1 wherein said adapter regulates its output power by reducing its
- 2 output voltage.
- 1 3. The system of claim 1 wherein said adapter includes a transformer and a power control
- 2 circuit coupled to a voltage feedback circuit, said voltage feedback circuit provides a feedback
- 3 signal to the transformer to regulate the output voltage from the adapter, and said power control
- 4 circuit causes said voltage feedback circuit to cause a reduction in the adapter's output voltage
- 5 when said output current exceeds said threshold.
- 1 4. The system of claim 3 wherein said power control circuit responds to changes in current
- 2 more slowly than said voltage feedback circuit responds to changes in voltage.
- 1 5. A computer system, comprising:

2 a CPU;
3 a battery subsystem;
4 a means for regulating an AC adapter's output voltage; and
5 a means for regulating an AC adapter's output power when the adapter's output current
6 exceeds a threshold.

1 6. The system of claim 5 wherein said means for regulating the output power includes a
2 means for causing the output voltage to be reduced as output current increases.

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1 10. The adapter of claim 8 wherein said adapter further includes a transformer and said voltage
2 regulator provides a feedback signal to the transformer to cause the output voltage from the adapter
3 to be a certain voltage, and said power control circuit causes said voltage feedback circuit to cause
4 a reduction in the adapter's output voltage when said output current exceeds said threshold.

1 11. The power regulator of claim 10 wherein said power regulator responds to changes in
2 current more slowly than said voltage regulator responds to changes in voltage.

1 12. An AC adapter, comprising:
2 a means for regulating an AC adapter's output voltage; and
3 a means for regulating an AC adapter's output power when the adapter's output current
4 exceeds a threshold.

1 13. The adapter of claim 12 wherein said means for regulating the output power includes a
2 means for causing the output voltage to be reduced as output current increases.

1 14. The adapter of claim 5 wherein said means for regulating an AC adapter's output power
2 responds to changes in output current more slowly than said means for regulating an AC adapter's
3 output voltage responds to changes in voltage.

1 15. A method of adjusting power load in a computer system including an AC adapter which
2 converts AC voltage to DC voltage for use of a plurality of loads, said method comprising:

- (a) regulating the output voltage of an AC adapter to an approximately constant level as long as the adapter's output current is less than a threshold;
- (b) reducing the output voltage of the adapter when said output current exceeds said threshold;
- (c) detecting a reduction in adapter output voltage; and
- (d) throttling back a load in response to the reduction in voltage.

16. The method of claim 15 wherein (d) includes reducing the charge current through a rechargeable battery.

17. The method of claim 15 wherein (d) includes reducing the clock frequency of a processor.

18. The method of claim 15 wherein (d) includes reducing the brightness of a display.

19. A method of adjusting power load in a computer system including an AC adapter which converts AC voltage to DC voltage for use of a plurality of loads, said method comprising:

- (a) a step for regulating the output voltage of an AC adapter to an approximately constant level as long as the adapter's output current is less than a threshold;
- (b) a step for reducing the output voltage of the adapter when said output current exceeds said threshold;
- (c) a step for detecting a reduction in adapter output voltage; and
- (d) a step for throttling back a load in response to the reduction in voltage.

1 20. The method of claim 19 wherein said load in (d) includes a battery charger.

1 21. The method of claim 19 wherein said load in (d) includes a processor.

1 22. The method of claim 19 wherein said load in (d) includes a display.

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